



USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

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CROP REPORT FOR WEEK ENDING MAY 9

AGRICULTURAL SUMMARY

Planting of corn is no longer moving at a record pace due to wet soil conditions over the last two weeks, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Emergence, growth and plant populations of both corn and soybeans are good in most areas of the state. Windy conditions made it difficult to spray herbicides again this past week. Some southern counties have experienced flooding in low lying areas which may require replanting of crops.

FIELD CROPS REPORT

There were 3.1 **days suitable for field work**. Eighty-one percent of the intended **corn** acreage has been **planted** compared with 10 percent last year and 52 percent for the 5-year average. By area, 81 percent of the crop has been planted in the north, 88 percent in the central region, and 66 percent in the south. Fifty-two percent of the corn acreage has **emerged** compared with 2 percent last year and 17 percent for the 5-year average. Thirty-five percent of the intended **soybean** acreage has been **planted** compared with 2 percent last year and 19 percent for the 5-year average.

Ninety-one percent of the **winter wheat** acreage is **jointed** compared with 79 percent last year and 86 percent for the 5-year average. Fourteen percent of the winter wheat crop is **headed** compared with 13 percent last year and 18 percent for the 5-year average. Winter wheat **condition** is rated 73 percent good to excellent compared with 79 percent last year at this time.

Major activities during the week included: tillage of soils, applying anhydrous ammonia, repairing equipment, spraying herbicides, moving grain to market, hauling and spreading manure and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 78 percent good to excellent compared with 74 percent last year. Pastures and hay crops are in mostly good condition due to the warm temperatures and adequate moisture. Livestock remain in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg.
Percent				
Corn Planted	81	71	10	52
Corn Emerged	52	26	2	17
Soybeans Planted	35	21	2	19
Soybeans Emerged	9	NA	0	1
Winter Wheat Jointed	91	69	79	86
Winter Wheat Headed	14	NA	13	18

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Pasture	0	1	21	56	22
Winter Wheat	0	3	24	59	14

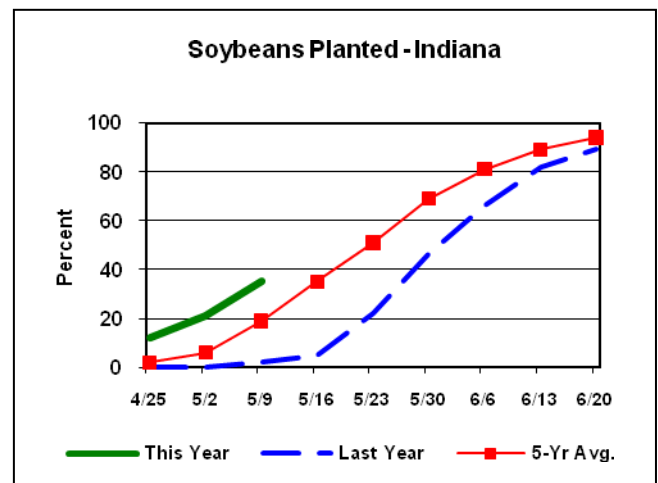
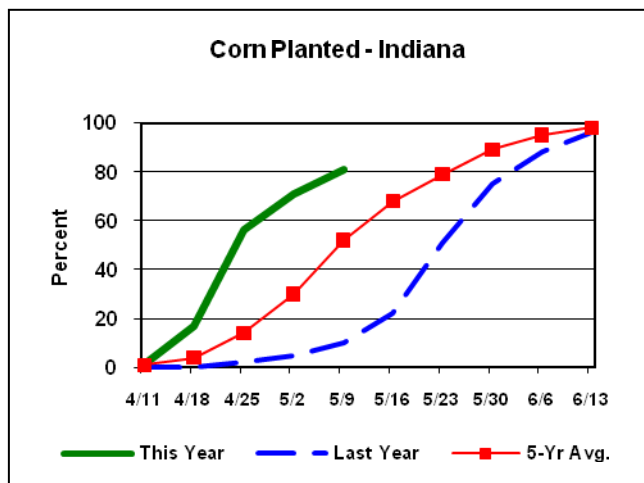
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

Soil Moisture	This Week	Last Week	Last Year
Percent			
Topsoil			
Very Short	0	0	0
Short	2	2	0
Adequate	68	63	38
Surplus	30	35	62
Subsoil			
Very Short	0	0	0
Short	2	5	1
Adequate	80	77	53
Surplus	18	18	46
Days Suitable	3.1	2.9	1.6

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Crop Progress



Other Agricultural Comments And News

Effects of Flooding or Ponding on Young Corn

Published May 2010

URL: <http://www.kingcorn.org/news/timeless/PondingYoungCorn.html>

Recent intense rainfall events (technically referred to as “toad stranglers” or “goose drowners”) have caused flooding of low-lying corn fields or ponding in poorly drained swales within fields. Other areas within fields, while not technically flooded or ponded, may remain saturated for lengthy periods of time. What are the prospects for recently submerged corn fields?

The sarcastic answer is that flooded crops will survive until they die. What this statement means is that no one can tell you with certainty the day after the storm whether a ponded area of a corn field will survive or whether there will be long-term yield consequences until enough time has gone by such that you can assess the actual recovery of the damaged plants. We can, however, talk about the factors that increase or decrease the risks of severe damage or death to flooded soils.

- Corn that is completely submerged is at higher risk than corn that is partially submerged.
 - Plants that are only partially submerged may continue to photosynthesize, albeit at limited rates.
- The longer an area remains ponded, the higher the risk of plant death.
 - Most agronomists believe that young corn can survive up to about 4 days of outright ponding if temperatures are relatively cool (mid-60's F or cooler); fewer days if temperatures are warm (mid-70's F or warmer).
 - Soil oxygen is depleted within about 48 hours of soil saturation. Without oxygen, the plants cannot perform critical life sustaining functions; e.g.

nutrient and water uptake is impaired and root growth is inhibited.

- Even if surface water subsides quickly, the likelihood of dense surface crusts forming as the soil dries increases the risk of emergence failure for recently planted crops.
 - Be prepared with a rotary hoe to break up the crust and aid emergence.
- The greater the deposition of mud on plants as the water subsides, the greater the stress on the plants due to reduced photosynthesis.
 - Ironically, such situations would benefit from another rainfall event to wash the mud deposits from the leaves.
- Corn younger than about V6 (six fully exposed leaf collars) is more susceptible to ponding damage than is corn older than V6.
 - This is partly because young plants are more easily submerged than older taller plants and partly because the corn plant's growing point remains below ground until about V6. The health of the growing point can be assessed initially by splitting stalks and visually examining the lower portion of the stem ([Nielsen, 2008b](#)). Within 3 to 5 days after water drains from the ponded area, look for the appearance of fresh leaves from the whorls of the plants.
- Extended periods of saturated soils AFTER the surface water subsides will take their toll on the overall vigor of the crop.
 - Some root death will occur and new root growth will be stunted until the soil dries to acceptable moisture contents. As a result, plants may be subject to greater injury during a subsequently dry summer due to their restricted root systems.

(Continued on Back Page)

Weather Information Table

Week Ending Sunday May 9, 2010

Station	Past Week Weather Summary Data							Accumulation				
	Air			Precip.			Avg	April 1, 2010 thru				
	Temperature			Precip.			4 in	May 9, 2010				
							Soil	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	80	35	58	+0	0.93	4		5.44	+0.64	15	302	+105
Francesville	77	33	59	+2	0.42	3		4.76	+0.06	14	294	+134
Valparaiso_AP_I	78	35	57	+2	0.74	4		4.86	-0.24	15	301	+152
Wanatah	79	35	57	+3	0.81	4	61	4.49	-0.40	15	256	+135
Winamac	77	36	59	+2	0.80	4		4.55	-0.15	13	313	+153
North Central (2)												
Plymouth	77	34	57	+0	0.71	4		4.22	-0.76	14	266	+94
South_Bend	76	35	57	+2	1.13	4		4.66	-0.10	15	297	+161
Young_America	80	35	59	+2	0.91	3		4.16	-0.39	11	313	+158
Northeast (3)												
Fort_Wayne	83	38	61	+5	0.47	6		4.52	+0.15	16	371	+226
Kendallville	79	38	58	+2	0.77	6		3.10	-1.24	17	258	+119
West Central (4)												
Greencastle	80	32	58	-2	0.18	2		3.39	-1.66	12	327	+106
Perrysville	81	35	60	+3	0.33	3	68	4.06	-0.98	17	373	+187
Spencer_Ag	82	34	60	+3	0.48	5		7.01	+1.62	17	366	+174
Terre_Haute_AFB	82	36	61	+2	0.18	2		5.98	+0.77	15	422	+201
W_Lafayette_6NW	82	34	60	+3	0.58	3	64	3.71	-1.17	12	352	+191
Central (5)												
Eagle_Creek_AP	82	39	62	+3	0.74	3		4.14	-0.73	13	439	+229
Greenfield	83	37	61	+3	0.93	4		4.81	-0.52	13	368	+189
Indianapolis_AP	82	37	62	+3	0.56	4		4.43	-0.44	13	459	+249
Indianapolis_SE	82	37	60	+2	0.82	4		4.57	-0.49	14	372	+177
Tipton_Ag	84	37	61	+5	0.66	4	64	3.24	-1.82	15	332	+196
East Central (6)												
Farmland	84	32	60	+5	0.91	5	63	4.09	-0.56	17	338	+209
New_Castle	82	36	59	+4	0.81	3		4.82	-0.56	14	324	+190
Southwest (7)												
Evansville	84	38	64	+3	0.39	3		5.91	+0.51	15	507	+189
Freelandville	83	39	63	+4	0.55	3		5.91	+0.61	15	447	+206
Shoals_8S	83	35	61	+2	0.32	2		5.98	+0.39	12	373	+137
Stendal	85	39	66	+5	0.42	3		6.03	+0.09	13	545	+271
Vincennes_5NE	86	38	63	+4	0.58	3	71	5.72	+0.42	16	455	+214
South Central (8)												
Leavenworth	84	38	63	+4	1.80	3		8.59	+2.60	16	443	+201
Oolitic	81	38	61	+3	0.42	4	66	5.91	+0.54	16	364	+157
Tell_City	84	44	65	+5	1.35	2		9.36	+3.11	13	510	+222
Southeast (9)												
Brookville	85	37	62	+5	0.67	4		4.03	-1.14	13	357	+190
Greensburg	85	35	63	+4	0.63	4		4.72	-0.75	15	440	+245
Seymour	84	35	62	+3	0.36	3		4.89	-0.34	13	369	+155

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DFN = Departure From Normal.
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

For more weather information, visit www.awis.com
or call 1-888-798-9955.

Effects of Flooding or Ponding on Young Corn (Continued)

- Concomitant (I found a new word in the dictionary!) with the direct stress of saturated soils on a corn crop, flooding and ponding can cause significant losses of soil nitrogen due to denitrification and leaching of nitrate N.
 - Significant loss of soil N will cause nitrogen deficiencies and possible additional yield loss.
 - On the other hand, if the corn dies in the ponded areas it probably does not matter how much nitrogen you've lost.
- Lengthy periods of wet soil conditions favor the development of seedling blight diseases, especially those caused by Pythium fungi ([Sweets, 2008](#)).
 - Poorly drained areas of fields are most at risk for the development of these diseases and so will also be risky for potential replant operations.
- Certain diseases, such as common smut and crazy top, may also become greater risks due to flooding and cool temperatures ([Malvick, 2002](#)).
 - The fungus that causes crazy top depends on saturated soil conditions to infect corn seedlings.
 - The common smut fungal organism is ubiquitous in soils and can infect young corn plants through tissue damaged by floodwaters. There is limited hybrid resistance to either of these two diseases and predicting damage is difficult until later in the growing season.

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